

AMENDMENTS TO THE CLAIMS

1-12. (Canceled)

13. (Currently amended) A method for depositing a ~~[[noble]]~~ platinum-metal alloy onto a surface of a microelectronic workpiece, the method comprising the steps of:

contacting the surface of the workpiece with an acidic bath comprising species of ~~a noble metal~~ platinum to be deposited on the surface of the microelectronic workpiece, species of a second metal selected from nickel, cobalt, lead, and tin to be deposited on the surface of the microelectronic workpiece, and an acid, pH of the acidic bath ranging from about 0.5 to 3.0;

providing an anode spaced from the surface of the microelectronic workpiece in contact with the acidic bath;

applying electroplating power between the surface of the microelectronic workpiece and the anode; and

depositing the noble metal and the second metal onto the surface of the microelectronic workpiece.

14-19. (Canceled)

20. (Currently amended) The method of Claim ~~[[19]]~~ 13, wherein the weight ratio of the second metal to platinum is greater than or equal to 5:1.

21. (Currently amended) The method of Claim ~~[[17]]~~ 13, wherein the platinum concentration ranges from about 1.0 g/L to 15 g/L.

22. (Original) The method of Claim 19, wherein the concentration of the second metal ranges from about 5 g/L to 70 g/L.

23. (Canceled)

24. (Original) The method of Claim 13, wherein the acid is sulfamic acid.

25. (Original) A method of Claim 13, wherein the acidic bath is at a temperature between about 40°C and 80°C.

26. (Original) The method of Claim 13, wherein the current density of the electroplating power ranges between about 10-100 mA/cm².

27. (Original) The method of Claim 13, wherein the acidic bath is at a temperature of about 75 C ± 5 C.